

Chapter 1

1.0 PURPOSE OF AND NEED FOR ACTION

Tims Ford Reservoir is a 10,680-acre impoundment on the Elk River at Mile 133.3 in Franklin and Moore Counties, Tennessee. Tims Ford Reservoir was completed in 1970 by the Tennessee Valley Authority (TVA) and was congressionally authorized for the purposes of flood control, hydroelectric generation, water supply, recreation, and economic development.

The reservoir is 34 miles long at full pool and has a surface area of 10,680 acres. Depth at the dam is 143 feet, and the average depth is about 50 feet. Average annual discharges from Tims Ford Dam are about 940 cubic feet per second (cfs), resulting in a hydraulic residence time of about 280 days. Tims Ford Reservoir is designed for a useful controlled drawdown of 30 feet from 895 feet to 865 feet mean sea level (msl) for flood protection. Annual drawdowns average about 18 feet. Normal winter reservoir levels range from 865 to 873 feet, and normal summer levels are 883 to 888 feet. Maximum level is 895 feet. The hydroelectric plant has two units. The first is a generating unit rated at 45,000 kilowatts (kW), 3,890 cfs. The second is a minimum flow unit rated at 39 kW, 74 cfs.

1.1 BACKGROUND

In 1959, citizens of the Elk River valley in Alabama and Tennessee created the Elk River Development Association (ERDA) to organize their efforts to secure federal support of a resource development program in the Elk River valley. The association enlisted the support of TVA in this endeavor as part of the TVA Tributary Area Development Program. The Tennessee Elk River Development Agency (TERDA) was created by the Tennessee General Assembly in 1963 to work with TVA on an Elk River development program. The enabling legislation (TCA 64-1-301) that created TERDA states:

“The agency is created for the purpose of developing and effectuating plans and programs for comprehensive development including the control and development of the water resources of those portions of the Elk River watershed and integrating plans, programs, and development activities with the overall economic development of the area described.”

On May 17, 1966, TVA and TERDA entered into a contract (TV-27333A) to “engage in a cooperative program of comprehensive, unified resource development for the purpose of fostering the orderly physical, economic, and social development of the Elk River area,” which included the construction of the Tims Ford Dam and Reservoir.

Under contract TV-27333A, those properties above the 895-foot contour voluntarily sold to the Federal Government were purchased in the name of TERDA (and were owned by TERDA) with TVA holding first lien. Those tracts acquired under the power of eminent domain were purchased in the name of the United States Government and remain under the custody of TVA. TERDA transferred to TVA all land acquired in the name of the TERDA below the 895-foot contour to be used for flood control, power generation, and other uses deemed by TVA to be essential for the proper operation of the Tims Ford project. In September 1980, Contract No. TV-27333A was replaced by Contract No. TV-50000A, which further defined the roles and responsibilities of each party in managing the overall Tims Ford project. In April 1996, TERDA was dissolved by the Tennessee General Assembly, and its assets, obligations, and responsibilities were transferred to the Tennessee Department of Environment and Conservation (TDEC). In February 1998, Contract No. TV-50000A was replaced by Contract No. 98RE2-229151, which redefined the obligations and responsibilities of TVA and TDEC to cooperatively develop a comprehensive Land Management and Disposition Plan (Plan). Summaries of each contract can be found in Appendix A.

TVA and TERDA purchased approximately 21,863 acres of land for the Tims Ford Project. To date, portions of this land have either been sold to other parties or committed to long-term easements. The

remaining unsold and uncommitted lands, totaling 6,453 acres, are considered plannable lands and are the focus of this land plan. The current status of the original 21,863 acres of project land is summarized Table in 1.1.

Table 1.1 Current Land-Use Status

Current Status	Acres
Sold to other parties	1,519
Committed to Public Parks	1,794
Plannable	6,453
TVA Lands Between Contours 888 and 895 (shoreline buffer)	1,397
Lands Below the 888 Contour (summer pool stage)	10,680
Total	21,863

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

Public Chapter 816 of the 1996 Acts of the Tennessee General Assembly (hereafter referred to as Public Chapter 816) terminated and ceased all activities of TERDA. The legislation transferred all powers, duties, contractual obligations, functions, and remaining land interests of the agency to TDEC. TDEC was charged with the responsibility for disposition of the remaining land interests. A copy of Public Chapter 816 is included in Appendix A.

TDEC and TVA propose to develop a land management and disposition plan in accordance with the current contract between the agencies. Through this Land Management and Disposition Plan (Plan), TDEC proposes to implement Public Chapter 816. TVA intends to use this Plan to systematically manage its reservoir properties. The development of the Plan is intended to foster the orderly economic and social development of the Elk River area and to determine future land uses.

According to the existing contract (98RE2-229151):

"The Plan shall allocate all portions of such project lands to specific uses, including TVA project operations, resource protection, resource management, industrial/commercial, recreation, residential, and any other uses deemed desirable by the parties. The Plan shall also determine which portions of such lands should be transferred to or retained by the State; transferred to or retained by TVA or other governmental entities for public purposes; or sold, leased, or otherwise disposed of. In developing the Plan, the parties shall attempt to allocate the lands so as to attain the maximum amount of area economic and social development consistent with effective environmental protection. The Plan shall specify the terms and conditions that would apply to the disposal, transfer, or retention of specific portions of land."

1.3 OTHER PERTINENT ENVIRONMENTAL REVIEWS AND DOCUMENTS

This Environmental Impact Statement (EIS) relies on and tiers from information contained in three other documents prepared by TVA, along with the 1991 Long Range Plan of the Tims Ford Project developed by the former TERDA.

1.3.1 SHORELINE MANAGEMENT INITIATIVE (SMI): AN ASSESSMENT OF RESIDENTIAL SHORELINE DEVELOPMENT IMPACTS IN THE TENNESSEE VALLEY (TVA, 1999)

In 1999, TVA completed an EIS on residential shoreline development impacts throughout the Tennessee Valley. The Record of Decision (ROD) for SMI was signed on May 24, 1999. Under the Blended Alternative adopted in the ROD, sensitive natural and cultural resource values of reservoir shorelines would be conserved and retained in three ways. First, by preparing a shoreline categorization for

individual reservoirs. Second, through encouraging voluntary donations of conservation easements to properties over which TVA holds a flowage easement (property over which TVA has the right to flood) or other shoreland to protect scenic landscapes. Finally, by establishing a premise that no additional residential access rights will be granted across public shorelines unless a “maintain and gain” policy to prevent losses of public shoreline is implemented. SMI acknowledged TVA’s long-standing contractual agreements with other agencies providing economic development of project lands on Tims Ford, Bear Creek, Tellico, and Beech Reservoirs. Individual land management plans for these reservoirs will determine the level of additional development that may be pursued by these agencies. These plans will be subjected to appropriate environmental reviews and will take into account decisions made as a result of SMI Final EIS as allowed by existing terms and contracts.

1.3.2 TIMS FORD STATE PARK ENVIRONMENTAL ASSESSMENT, TRANSFER OF PROPERTY RIGHTS TO ALLOW EXPANSION OF TIMS FORD STATE PARK, FRANKLIN AND MOORE COUNTIES, TENNESSEE, (TVA, 1997)

In 1997, TVA completed an Environmental Assessment (EA) for transfer of property rights to allow expansion of the Tims Ford State Park by TDEC. Under the proposed action, TDEC desired to expand the park by incorporating additional TDEC and TVA properties. TVA approval of the incorporation of the TDEC property was required under the conditions of Contract No. TV-50000A. Subsequently, a permanent easement for recreational purposes was issued to TDEC for approximately 221 acres of TVA property on Tims Ford Reservoir. Also incorporated into Tims Ford State Park were approximately 1,193 acres of project land which is now administered by TDEC. The transfer did not include lands below the 895-foot contour which are retained by TVA.

1.3.3 TENNESSEE RIVER AND RESERVOIR SYSTEM OPERATION AND PLANNING REVIEW ENVIRONMENTAL IMPACT STATEMENT (TVA, 1990)

In December 1990, TVA completed an EIS addressing changes to TVA reservoir operations for maintaining minimum flows below dams, for increasing dissolved oxygen (DO), and for delaying normal maximum lake level drawdowns. In this EIS, TVA also addressed the environmental and socioeconomic consequences of changes in reservoir operations on land and shoreline development.

1.3.4 TENNESSEE ELK RIVER DEVELOPMENT AGENCY LONG RANGE PLAN (TERDA, 1991)

In 1991, the Tennessee Elk River Development Agency issued a long range plan for its programs in the Elk River Watershed. Two goals were identified to direct TERDA’s program and policies for the Tims Ford Project. The first was to maximize economic and community benefits in the Elk River watershed. The second goal was to minimize negative impacts on the physical environment or aesthetics of the reservoir area. The TERDA Board recognized these as conflicting goals and established policies and priorities for Tims Ford development. The plan took into consideration land already developed, developable land, marginally developable land, undevelopable land, and special project land tracts. Proposed land uses were directly established to maintain water quality, the aesthetics of the lake environment, and the preservation of property values. Land uses were designated as residential, recreational, agricultural, and open space. Revenues from the Tims Ford project went into an Area Development Program which was intended to benefit eight Tennessee counties (Coffee, Franklin, Giles, Grundy, Lawrence, Lincoln, Marshall, and Moore) and two Alabama counties (Limestone and Lauderdale). Although the Tims Ford Project has been the most visible of TERDA programs, it was the Area Development Program that allowed TERDA to meet its economic and community development obligations in the Elk River watershed. The Tims Ford Project provided the revenue for the Area Development Program. TERDA established three priorities intended to achieve the agency’s purpose of physical, economic, and social development of the Elk River area—job creation, human resource development, and enhancement of natural resources.

1.4 THE SCOPING PROCESS

TVA and TDEC formally began the National Environmental Policy Act (NEPA) process with a press release on October 2, 1998, announcing a public comment period extending through December 1, 1998,

to solicit input and to conduct public scoping meetings. Opportunities for the public to make comments included:

1. Completing a written survey
2. Attending one of the planned public meetings
3. Visiting TDEC's website at <http://www.state.tn.us/environment/elk/> and completing an on-line survey
4. Sending written comments to "The Land-Use Plan," 20th Floor L&C Tower, 401 Church Street, Nashville, TN 37243-0454
5. Calling either the toll free number (1-800-604-9346) or (615) 253-2106 (within the Nashville area) to request information

Another joint press release was issued on November 3, 1998, announcing that public scoping meetings would be held at the Franklin County High School, Winchester, Tennessee, on November 9, 1998, and at the Lincoln County High School, Fayetteville, Tennessee, on November 10, 1998. A list of newspapers that published articles announcing the meetings is in Table B-1, Appendix B. At the public scoping meeting, members of the public were invited to provide oral comments and/or to submit written comments by the close of the scoping period, December 1, 1998. The meetings were attended by 181 individuals (36 in Fayetteville and 145 in Winchester), nearly all of whom participated in informal breakout sessions. These sessions were designed to solicit input for the preparation of the environmental document. A total of 350 surveys were completed, 316 of which were received by mail and 34 by Internet. A Public Scoping Document was prepared and is attached in Appendix B.

TVA and TDEC also solicited input from a representative cross section of groups who use or are concerned with the natural resources of Tims Ford Reservoir. Various state and federal agencies and resource conservation groups such as the U. S. Fish and Wildlife Service (USFWS), U. S. Army Corps of Engineers (USACE), Tennessee Wildlife Resources Agency (TWRA), and others were asked to provide information and input, including information concerning proposed or ongoing activities and land-use issues around Tims Ford Reservoir. Letters were received from TWRA and USFWS.

Subsequent to the scoping meetings, the agencies determined that an EIS would allow a better understanding of the impacts of the alternatives. A Notice of Intent (NOI) was published in the Federal Register on July 22, 1999 (Volume 64, Number 140). The comment period on the scope of the EIS closed on August 31, 1999.

1.4.2 PUBLIC REVIEW OF THE DRAFT EIS AND LAND MANAGEMENT AND DISPOSITION PLAN

In November 1999, TVA and TDEC released the Draft EIS and Land Management and Disposition Plan (Plan) for public review. Copies of the DEIS and Plan were mailed to individuals, agencies, and organizations. The draft EIS and Plan were also available on TDEC's website, <http://www.state.tn.us/environment/elk/>. The Notice of Availability (NOA) was published in the Federal Register on November 12, 1999. A press release announcing the Open Houses was released on November 8, 1999, and paid advertisements appeared in the following papers:

1. Times Daily (Florence, AL) - Sunday, November 28, 1999
2. Herald Chronicle - Thursday, November 25, 1999
3. Huntsville Times - Sunday, November 28, 1999
4. Tullahoma News - Sunday, November 28, 1999
5. Tennessean - Sunday, November 28, 1999
6. The Elk Valley Times, Wednesday, November 24, 1999

Several avenues were available for people to provide their input on the draft EIS and Plan. Each draft EIS and Plan included a comment card. The TDEC website allowed for email responses to be received. A series of meetings were held to solicit input and answer questions about the draft EIS and Plan.

Two open houses were held to answer questions and discuss issues regarding the Tims Ford Draft EIS and Land Management & Disposition Plan. The Winchester (Franklin County) Open House, held on November 30, 1999, had 175 participants, and the Motlow College (Moore County) held on December 2,

1999, had 54 participants. The meeting format included a short 10-minute video overview of the project, a room for one-on-one questions and answers, and opportunities for participants to record or submit their comments.

TDEC and TVA received comments from 268 people, agencies, and organizations during this comment period. Comments were received via letters, electronic mail (e-mail), petitions, and oral comments recorded at the public meetings.

1.4.3 RESPONSE TO PUBLIC COMMENTS

The agencies received a large volume of comments on the DEIS. These comments have been summarized and combined, along with responses, in Appendix B. In response to public comments, some allocations were changed, a new alternative and a new allocation zone was created, and some analyses in the EIS were improved. Details of these changes are provided in Chapter 2.

1.5 TVA DECISION

TVA must decide whether to adopt one of the TVA-TDEC jointly-prepared land plan action alternatives or to continue with the status quo of managing and disposing the properties on a case-by-case basis. The Plan will require approval by the TVA Board of Directors if it is to be adopted as policy to provide for long-term land stewardship and accomplishment of TVA responsibilities under the 1933 TVA Act.

1.6 TDEC DECISION

TDEC will decide whether to approve a jointly-prepared land plan, or to select another process to implement Public Chapter 816. Land transfers contemplated by this Plan would require approval by the Tennessee State Building Commission, created by the Tennessee Code Annotated, 4-15-101, prior to implementation.

1.7 NECESSARY FEDERAL AND STATE PERMITS OR LICENSES

No federal permits are required to develop a reservoir land-use plan. To the extent possible, site-specific information on reservoir resources has been characterized in this EIS, and potential impacts on these resources were considered in making the future land-use allocations. Appropriate agencies regulating wetlands, endangered species, and historic resources have been consulted during this planning process. When specific actions such as a subdivision, dock, building, road, or walking trail are proposed additional review and appropriate permits or consultations may be required in order to approve specific actions. These laws include the Clean Air Act, Clean Water Act, Endangered Species Act, Farmland Protection Policy Act, National Historic Preservation Act, and Resource Conservation and Recovery Act. Some of the water-related permits that may be needed for residential development are described below:

The Water Quality Control Act, as amended in 1977, allowed the State of Tennessee to receive delegated authority of the National Pollutant Discharge Elimination System (NPDES) permit program. This law provides the permitting and enforcement powers of the Tennessee Department of Environment and Conservation (TDEC) in regulating wastewater treatment systems, construction and industrial storm water, and in controlling other pollution sources. There are two divisions within TDEC which permit various wastewater treatment systems. The Division of Ground Water Protection permits septic systems serving single family homes and other small flow facilities. The Division of Water Pollution Control (WPC) permits wastewater treatment systems which discharge to waters of the State, which utilize spray irrigation or shallow drip irrigation for effluent disposal or which transport wastewater to another facility for treatment and disposal. WPC regulates storm water from construction and industrial sites as well as other water quality issues.

In 1992, the WPC issued the General NPDES Permit for Storm Water Discharges from Construction Activity to cover water quality problems, such as erosion, during the construction phase of a project. This would apply to industrial, residential, recreational, or any other construction project. Coverage under this general permit is required for all projects which will disturb a total of five or more acres of land. Projects

less than five acres do not require this permit, but are still required to comply with the Water Quality Control Act.

The General NPDES Permit for Storm Water Discharges from Construction Activity expired September 26, 1997. It is to be replaced with the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities, TNR 10000. Coverage under this new permit will be the same with the exception that sites disturbing less than five acres will also be required to file a Notice of Intent (NOI) when the division determines that coverage for such construction activities is necessary to protect water quality.

The WPC also regulates storm water runoff from industrial facilities. This is covered by the Water Quality Control Act and the General NPDES Multi-Sector Storm Water Permit. Facilities with certain standard industrial classification (SIC) codes and of certain types are required to obtain coverage under this general permit. The permit sets terms and conditions for monitoring, sampling, and reporting storm water runoff from these facilities. Facilities not covered by this general permit are still required to comply with the Water Quality Control Act.

TDEC also issues Aquatic Resource Alteration Permits (ARAP) for any activity which involves the alteration of waters of the State. These may be issued as a general permit or individual permit. General ARAP permits cover the following activities:

1. Construction of launching ramps
2. Alteration of wet weather conveyances
3. Minor road crossings
4. Utility line crossings
5. Bank stabilization
6. Sand and gravel dredging
7. Debris removal

Under certain situations, some of the above activities may be required to be permitted under an individual permit.

Systems permitted by the GWP are described in the rules promulgated by that division. These systems include conventional septic systems and alternative systems, such as low pressure pipe (LPP) and mound systems. They also have provisions to issue variances to their rules when circumstances warrant. The division also approves plats for subdivisions with lots smaller than five acres.

Systems permitted by the WPC must be designed according to rules promulgated by that division and, where applicable, follow published design criteria. All domestic wastewater systems permitted by WPC must be operated by an appropriately certified operator. Division policy dictates that certain wastewater treatment systems must be considered and found to be unsuitable before other systems will be considered. The alternatives to be considered and the order of consideration are as follows:

1. Connection to a municipal/public sewer system or subsurface onsite disposal as regulated by the Division of Groundwater Protection.
2. Onsite disposal by spray or drip irrigation as regulated by WPC.
3. Direct discharge to waters of the State.